



IFW

PATENT
Docket No. 554792000401

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: **MAIL STOP: AMENDMENT, Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450** on October 28, 2004


LILIA OLSEN

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of;

Allan I. BAIN et al.

Serial No.: 10/674,684

Filing Date: September 29, 2003

For: ION CHANNEL MODULATING
COMPOUNDS AND USES THEREOF

Examiner: Not Yet Assigned

Group Art Unit: 1626

**SUPPLEMENTAL INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

MAIL STOP: AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Pursuant to the USPTO notice dated July 11, 2003, waiving the requirement under 37 C.F.R. § 1.98 (a)(2)(i) to provide copies of U.S. Patents and U.S. Published Applications, copies of those references are not submitted. Copies of foreign documents and non-patent literature are submitted herewith. The Examiner is requested to make these documents of record.

sf-1747676

This Supplemental Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☒ **Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.**
- ☐ After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
 - ☐ A fee is required. A check in the amount of * is enclosed.
 - ☐ A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly; no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of * is enclosed.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.

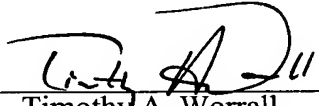
Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Supplemental Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing **554792000401**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: October 28, 2004

Respectfully submitted,

By: 
Timothy A. Worrall
Registration No. 54,552

Morrison & Foerster LLP
425 Market Street
San Francisco, California 94105-2482
Telephone: (415) 268-7000
Facsimile: (415) 268-7522



Please type a plus sign inside this box → ☐

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/21 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

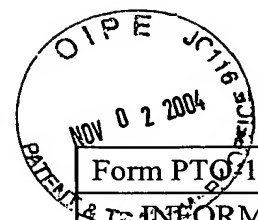
TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/674,684	
	Filing Date	September 29, 2003	
	First Named Inventor	Allan I. BAIN	
	Group Art Unit	1626	
	Examiner Name	Not Yet Assigned	
Total Number of Pages in This Submission	17 + 183 refs	Attorney Docket Number	554792000401

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form - 1 pg IN DUPL	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Extension of Time Request - 1 pg	<input type="checkbox"/> Power of Attorney - 1 pg	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below)
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	POSTCARD
<input checked="" type="checkbox"/> Information Discl. Stmt. - 3 pgs PTO-1449 - 13 pgs w/183 cited refs	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s)	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual Name	Timothy A. Worrall (Reg. No. 54,552) MORRISON & FOERSTER LLP CUSTOMER 20872
Signature	
Date	October 28, 2004

CERTIFICATE OF FIRST CLASS MAIL	
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MAIL STOP: AMENDMENT, Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on October 28, 2004	
Dated: October 28, 2004	Signature (Lilia Olsen)

SF-1808378



Form PTO 1449	Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)	Applicant Allan I. Bain et al.	
	Filing Date September 29, 2003	Group Art Unit 1626
	Mailing Date October 28, 2004	

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
	1.	9/27/60	2,954,380	Shapiro et al.			
	2.	11/16/95	3,218,328	Shapiro et al.			
	3.	3/20/79	4,145,435	Szmuszkovicz			
	4.	12/18/79	4,179,501	Szmuszkovicz			
	5.	7/1/86	4,598,087	Horwell			
	6.	4/7/87	4,656,182	Horwell			
	7.	5/5/87	4,663,343	Horwell et al.			
	8.	8/8/89	4,855,316	Horwell et al.			
	9.	11/14/89	4,880,800	Wallis			
	10.	3/6/90	4,906,655	Horwell et al.			
	11.	5/28/91	5,019,588	Horwell et al.			
	12.	9/24/91	5,051,428	Horwell et al.			
	13.	10/22/91	5,059,620	Stout et al.			
	14.	2/20/96	5,492,825	Jan et al.			
	15.	4/9/96	5,506,257	MacLeod et al.			
	16.	6/10/97	5,637,583	MacLeod et al.			
	17.	9/23/97	5,670,335	Jan et al.			
	18.	3/17/98	5,728,535	Lester et al.			
	19.	3/31/98	5,734,021	Lester et al.			
	20.	5/12/98	5,750,537	Nomura et al.			
	21.	10/6/98	5,817,698	Brown et al.			
	22.	3/23/99	5,885,984	MacLeod et al.			
	23.	1/16/01	6,174,879	MacLeod et al.			
	24.	1/30/01	6,180,632	Myers et al.			

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449	Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Applicant Allan I. Bain et al.	
(Use several sheets if necessary)	Filing Date September 29, 2003	Group Art Unit 1626
	Mailing Date October 28, 2004	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
	25.	9/30/93	WO 93/19056	PCT			
	26.	4/14/94	WO 94/07843	PCT			
	27.	7/7/94	WO 94/14435	PCT			
	28.	3/30/95	WO 95/08544	PCT			
	29.	10/26/95	WO 95/28155	PCT			
	30.	6/20/96	WO 96/18615	PCT			
	31.	8/8/96	WO 96/23894	PCT			
	32.	9/12/97	WO 97/32857	PCT			
	33.	12/31/97	WO 97/49680	PCT			
	34.	1/21/99	WO 99/02159	PCT			
	35.	1/28/99	WO 99/03468	PCT			
	36.	3/11/99	WO 99/11252	PCT			
	37.	4/8/99	WO 99/16431	PCT			
	38.	10/7/99	WO 99/50205	PCT			
	39.	10/7/99	WO 99/50225	PCT			
	40.	12/24/03	WO 03/105756	PCT			
	41.	4/5/88	1234808	CA			
	42.	4/12/88	1235122	CA			
	43.	6/6/90	2004575	CA			
	44.	12/23/97	2008391	CA			
	45.	6/28/93	2058502	CA			
	46.	3/20/01	2132841	CA			
	47.	3/30/95	2172513	CA			
	48.	9/12/97	2240728	CA			
	49.	1/28/99	2289055	CA			
	50.	6/6/74	DE 2 259 260	DE			No
	51.	7/6/78	DE 2 658 401 (English Abstract)	DE			No

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449	Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Applicant Allan I. Bain et al.	
(Use several sheets if necessary)	Filing Date September 29, 2003	Group Art Unit 1626
	Mailing Date October 28, 2004	

	52.	12/12/85	DE 3 517 901 (English Abstract)	DE			No
	53.	5/20/87	0222533 A1	EP			
	54.	8/1/90	0380063 A1/ B1	EP			
	55.	7/3/85	0147085 A2/B1	EP			
	56.	12/19/01	0720605 B1	EP			
	57.	6/13/90	0372466 A2/A3	EP			
	58.	7/28/93	0552386 A1	EP			
	59.	2/28/98	HU 215963 B	HU			No
	60.	11/5/90	JP 02-270864 (English Abstract)	JP			No

OTHER DOCUMENTS (including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
	61.	Adcock, J.J. et al., (2003) "RSD931, a novel anti-tussive agent acting on airway sensory nerves" Br J Pharm, 138:407-416
	62.	Altria, Kevin D. et al., (2001) "Capillary Electrophoresis as a Routine Analytical Tool in Pharmaceutical Analysis" LCGC 19(9): 972-985
	63.	Amin, et al., (1996) "RPR 101821, a New Potent Cholesterol-lowering Agent: Inhibition of Squalene Synthase and 7-Dehydrocholesterol Reductase", Naunyn-Schmiedeberg's Arch Pharmacol 353:233-240
	64.	Bain, et al., (1997) "Better Antiarrhythmics? Development of Antiarrhythmic Drugs Selective for Ischaemia-Dependent Arrhythmias", Drug Development Research 42:198-210
	65.	Barrett, T.D. (2000) "Ischaemia selectivity confers efficacy for suppression of ischaemia-induced arrhythmias in rats" Eur J Pharm, 398:365-374
	66.	Barrett, T. D. et al., (1997) "A model of myocardial ischemia for the simultaneous assessment of electrophysiological changes and arrhythmias in intact rabbits" J Pharmacol Toxicol Methods, 37:27-36
	67.	Barrett, T.D. et al., (1996) "Atypical Dose Response curves for Antiarrhythmic Drugs"

EXAMINER:	DATE CONSIDERED:
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.	

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date October 28, 2004	
BPS Proceedings 115P.			
68.	Barrett, T. D. et al., (1996) "Glibenclamide Possesses Transient, Ischaemia Selective Class III Antiarrhythmic Actions But does not Prevent Ischaemic Arrhythmias" BPS Proceedings 116P		
69.	Barrett, Terrance D. (1997) "Ischemia Selective Electrophysiological and antiarrhythmic actions of RSD1019 in ischemic cardiac tissue" J Mol Cell Cardiol, pp 197		
70.	Barrett, Terrance D. et al., (2000) "RSD 1019 suppresses ischaemia-induced monophasic action potential shortening and arrhythmias in anaesthetized rabbits" Br J Pharm, 131:405-414		
71.	Beatch, et al., (2002) "Selectively Prolongs Atrial Refractoriness and Terminates AF in Dogs with Electrically Remodeled Atria", (NASPE) North Amer. Soc. of Pacing & Electrophysiol. 24:698 (Abstract 702)		
72.	Beatch, G. et al., "Effect of a Novel Anti-tussive Compound CP1 Against Citric Acid Induced Cough in Guinea-Pigs" Proc West Pharmacol Soc 20		
73.	Beatch, G. et al., (2003) "Electrophysiological Profile of RSD1235, A New Drug for Conversion of Atrial Fibrillation" Abstracts from AHA Circulation ISSN 0009-7322.		
74.	Beatch, G. et al., "RSD1235 Rapidly and Effectively Terminates Atrial Fibrillation" Abstract submission ESC Congress August 30-September 3, 2003, in Vienna, Austria		
75.	Beatch, G.N. et al., (1996) "Antihistamine-induced Ventricular Arrhythmias" BPS Proceedings 120P		
76.	Beatch, G.N. et al., (1997) "Characterization of a Non-Human Primate Model of Drug-Induced Torsades De Pointes" Proc. West. Pharmacol. Soc., 40: 13-16		
77.	Beatch, G. N. et al., "RSD1235, A Novel Atrial-Selective Antiarrhythmic Drug, Shows Rapid and Extensive Oral Absorption in Man" 12 th International Congress on Cardiovascular Pharmacotherapy, May 7-10, 2003, Barcelona, Spain		
78.	Beatch, G.N. et al., (2002) "RSD1235 Selectively Prolongs Atrial Refractoriness and Terminates AF in Dogs with Electrically Remodeled Atria" PACE 24(Part II):698. Abstract 702		
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date October 28, 2004	
	79.	Beatch, G. N. et al., (2002) "Ventricular Fibrillation, and Uncontrolled Arrhythmia Seeking New Targets" Drug Develop Res 55:45-52	
	80.	Bian, et al., (1998) "Effects of K-opioid receptor stimulation in the heart and the involvement of protein kinase C" Brit. J. Pharmacol. 124:600-606	
	81.	Billman, (2003) "RSD-1235", Current Opinion Investigational Drugs 4(3):352-354	
	82.	Boiadjev, et al., (1996) "pH-Sensitive Exciton Chirality Chromophore..Solvatochromic Effects on Circular Dichroism Spectra", Tetrahedron: Asymmetry 7(10):2825-2832	
	83.	Bowen, et al., (1992) "Characterization of the enantiomers of cis-n-[2-(3,4-Dichlorophenyl)Ethyl]-N-Methyl-2-(1-Pyrrolidinyl)Cyclohexylamine (BD737 and BD738): Novel Compounds with High Affinity, Selectivity and Biological Efficacy at Sigma Receptors" J. Pharmacol. Exp. Ther. 262(1):32-40	
	84.	Cardiome Drug Effective for Heart Patients. Press Release, September 3, 2002, 3 pages	
	85.	Cardiome Pharma Corp. Healthcare (Underweight) Company Report December 12, 2002. 26 pages	
	86.	Cardiome Pharma Completes Phase I Safety Study. New Release Transmitted By CNN Newswire, July 30, 2001. 2 pages	
	87.	Cardiome Reports Dosing of First Patient in Pivotal Phase II Study. Press Release January 17, 2002. 3 pages	
	88.	Cardiome Reports Oral Absorption of RSD1235 in Humans. News Release via Canada Newswire (2002). 3 pages	
	89.	Clohs, L. et al., (2002) "Validation of a capillary electrophoresis assay for assessing the metabolic stability of verapamil in human liver microsomes" J Cap Elec & Microchip Tech. 007: 113-117	
	90.	Clohs, Lilian. "Bio-Analytical Applications of Capillary Electrophoresis In A Drug Discovery Setting" CSC Seminar June 2002, 29 pages	
	91.	Clohs, Lilian "Capillary Electrophoresis And Its Applications In The Pharmaceutical Industry" Short Course: One Platform Fits Many Applications. CSC 2002 Short Course, 52 pages	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date October 28, 2004	
	92.	Clohs, Lilian "Capillary Electrophoresis as an Analytical Tool in the Drug Discovery Process" Presentation CE Symposium, August, 2000, 40 pages	
	93.	Clohs, Lilian et al., (2002) "CE Analysis of Propranolol in Human Serum Using Dynamic Capillary Coating" CE Currents: LCGC Europe, Reader Service 14, pp: 289-293	
	94.	Clohs, Lilian. "CE and Drug Metabolism Studies: A Powerful Combination in Drug Discovery" CE Symposium Washington, DC, (August 2002), 31 pages	
	95.	Clohs, Lilian (2001) "Pharmacokinetics profiling of new drug candidates: a key process in drug discovery" 4(1): 6	
	96.	Clohs, Lilian "The Versatility of CE for Drug Pharmacokinetics and Metabolism Studies" Presentation CE Symposium, August, 2001, 46 pages	
	97.	Crotti, et al., (1998) "Regiochemical control of the ring-opening of epoxides by means of chelating processes Part 13...", Chemical Abstracts 129(17):662-663, abstract no. 216472k	
	98.	Crotti, et al., (1998) "Synthesis and Ring-Opening Reactions of the Diastereoisomeric <i>cis</i> - and <i>trans</i> -Epoxides Derived from 3-(Benzyloxy)cyclopentene and 2-(Benzyloxy)-2,5-dihydrofuran" Eur. J. Org. Chem. 8:1675-1686	
	99.	De Costa, Brian R. (1990) "Synthesis and Evaluation of N-Substituted <i>cis</i> -N-Methyl-2-(1-pyrrolidinyl)cyclohexylamines as High Affinity σ Receptor Ligands. Identification of a New Class of Highly Potent and Selective σ Receptor Probes" J Med Chem, 33:3100-3110	
	100.	Doci, A. "Local Anesthetic Effects of Intradermal RSD921 In Healthy Subjects" Clin Pham & Therapeutics, 65(2): 177	
	101.	Duan, D. et al., (1993) "Potassium Channel Blocking Properties of Propafenone in Rabbit Atrial Myocytes ¹ " J Pharm Exp Ther 264(3): 1113-1123	
	102.	Ezrin, Alan M. et al., (2002) "A Dose-Ranging Study of RSD1235, A Novel Antiarrhythmic Agent, In Healthy Volunteers" Pharmacologist, 44(2) (Supplement I), A15: XIV th World Congress of Pharmacology: Meeting Abstracts	
	103.	Ezrin, et al., (2002) "P297 Safety and Pharmacokinetics of RSD1235, a Novel Atrial Fibrillation Converting Drug, in Health Volunteers", Abstracts: 11 th Int. Congress	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date October 28, 2004	
Cardiovasc. Pharmacother. 16 Abstract P297			
	104.	Ezrin, Alan et al., (2002) "Safety and Pharmacokinetics of RSD1235, A novel Atrial Fibrillation Converting Drug, In Healthy Volunteers & Statins Benefit Coronary Heart Disease Patients more than Hypercholesterolaemic Subjects: Inferences Bases on NNT" Poster Int Soc Cardio Pharm, pp 49	
	105.	Fedida, D. et al., (2002) "Kv1.5 is an Important Component of Repolarizing K ⁺ Current in Canine Atrial Myocytes" Circulation Research Peer Review Plus Manuscript PDF, 38 pages	
	106.	Fedida D. et al. "Kv1.5 channels contribute to canine atrial repolarization." Circulation 2003 in press, (accepted for presentation at AHA Scientific Sessions, November 8-12, 2003, Orlando, FL). Circulation 2003, v108, p1386	
	107.	Franciosi, Luigi G. et al., "Phase II Clinical Trial of RSD921 as a Local Anaesthetic in Patients Undergoing Venous Cannulation For Elective Treatment" 28th Annual ACCP Meet Abstract 32, pp 977	
	108.	Franciosi, Sonia et al. (2001) "pH-dependent blocking actions of three novel antiarrhythmic compounds on K ⁺ and Na ⁺ currents in rat ventricular myocytes" Eur J Pharm, 425:95-107	
	109.	Franciosi L et al. "Development and evaluation of a quality assessment instrument for clinical trial protocols." Pharmacologist 44(2):A160, 2002 (Abstract #98.1, Poster at XIV World Congress of Pharmacology, July 7-12, 2002, San Francisco, CA	
	110.	Franqueza, L. et al., (1998) "Effects of propafenone and 5-hydroxy-propafenone on hKv1.5 channels" Br J Pharm 125:969-978	
	111.	Friess, et al., (1961) "Central Activity Evoked in the Cat by Cis-Trans Isomers of 1,2-Aminocyclohexanol Derivatives" Toxicol. Appl. Pharmacol. 3:638-653	
	112.	Grant, (1998) "Mechanisms of Atrial Fibrillation and Action of Drugs Used in its Management", Am J Cardiol 82:43N-49N	
	113.	Halfpenny, Paul R. (1990) "Highly Selective <i>k</i> -Opioid Analgesics. 3. Synthesis and Structure-Activity Relationships of Novel <i>N</i> -[2-(1-Pyrrolidinyl)4- or -5-substituted-cyclohexyl]arylamide Derivatives" J Med Chem, 33:289-291	
	114.	Halfpenny, Paul R. et al., (1989) "Highly Selective <i>k</i> -Opioid Analgesics. 2. Synthesis and Structure-Activity Relationships of Novel <i>N</i> -[(2-Aminocyclohexyl)aryl]acetamide Derivatives" J Med Chem, 32:1620-1626	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date October 28, 2004	
	115.	Hayes, ES. et al., (1997) "Actions of Arylpiperazines on Corpus Cavernosum Smooth Muscle <i>In Vitro</i> " Asia Pac J Pharmacol, 12:97-103	
	116.	Hayes, ES. et al., (1997) "Direct Actions of Arylpiperazines on Rabbit and Human Corpus Caversonal Smooth Muscle <i>In Vitro</i> " Asia Par J Pharmacol, Abstract S15	
	117.	Hayes, E. S. et al., (1996) "RSD992 Enhances Erection and Copulation in Rats and Erection in Primates" Int J Impotence Res, pp 189, (Abstract P24)	
	118.	Hesketh, J., et al., "Safety of RSD1235 in a rabbit purkinje fiber model", (XIVth World Congress of Phar.: Meeting Abstracts: 22.12	
	119.	Hesketh JC. and Fedida D. et al. "Ionic mechanisms of atrial fibrillation." In <u>Cardiac Drug Development Guide</u> , ed. Pugsley, M. Ch 9, pp163-174, Humana Press, NJ. 2003	
	120.	International Search Report mailed on August 3, 1999, for PCT patent application no. PCT/CA99/00280, 5 pages	
	121.	International Search Report mailed on July 12, 2004, for PCT patent application no. PCT/US03/34655 filed on October 31, 2003, 10 pages	
	122.	Keefe, D. et al. (1981) "New Antiarrhythmic Drugs: Their Place in Therapy" Drugs 22:363-400	
	123.	Kertesz, R. et al., "The Electrophysiological and Antiarrhythmic Actions of RSD Analogs of U50,488H in Rats" Proc west Pharmacol Soc ab. 9 pages	
	124.	Lang, C. C. et al., (2000) "Clinical Evaluation of RSD921 As a Local Anaesthetic in Patients Undergoing Venous Cannulation for Elective Treatment" Clin Pham & Therapeutics, pp 142	
	125.	Lewis, et al., (1995) "Enzyme inhibition during the conversion of squalene to cholesterol", Steroids 60:475-483	
	126.	Li, G-R. et al., (1996) "Adrenergic Modulation of Ultrarapid Delayed Rectifier K ⁺ current in Human Atrial Myocytes" Circ. Res.78:903-915	
	127.	Malayev, A. A. et al., (1995) "Mechanism of Clofilium Block of the Human Kv1.5 Delayed Rectifier Potassium Channel" Mol Pharm 47:198-205	
	128.	Martens, et al., (1989) "Einfache Synthese neuer anellierter Pyrrole", J. Synth. Org.	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date October 28, 2004	
		Chem. 12:965-967	
	129.	Matyus, et al., (1997) "Antiarrhythmic Agents: Current Status and Perspective", Medicinal Research Reviews 17(5):427-451	
	130.	McLarnon, J. et al., (1996) "Mixed Block of K and Na Currents By KC8851, A Structural of Tedisamil <i>In Vitro</i> and <i>In Vivo</i> Studies" BPS Proceedings 114P	
	131.	Moorman, et al., (1986) "pK _a Does Not Predict pH Potentiation of Sodium Channel Blockade by Lidocaine and W6211 in Guinea Pig Ventricular Myocardium ¹ ", The Journal of Pharmacology and Experimental Therapeutics 238(1):159-166	
	132.	Morisawa, et al., (1991) "Preparation of fluorocarbocycle nucleosides as antitumor agents", Chemical Abstracts 115(5):904-905, abstract no. 50215n	
	133.	Nakahsima, H. et al., (2002) "Angiotensin II Type I Receptor Antagonist Prevents the Promotion of Atrial Fibrillation" PACE 24(Part II):698. Abstract 701	
	134.	Nattel, (1998) "Experimental evidence for proarrhythmic mechanisms of antiarrhythmic drugs", Cardiovascular Research 37:567-577	
	135.	Nattel, et al., (1998) "Effects of the novel antiarrhythmic agent azimilide on experimental atrial fibrillation and atrial electrophysiologic properties", Cardiovascular Research 37:627-635	
	136.	Nattel, et al., (2001) "P2362: RSD1235: a novel antiarrhythmic agent with a unique electrophysiological profile that terminates AF in dogs", Eur. Heart J 22(Suppl):448 (Abstract P2362)	
	137.	Nattel, S. et al., "The Role of Channel Opening in Transient Outward Current Block By Quinidine, Flecainide, and 4-Aminopyridine in Human Atrial Myocytes" K Channels II: Regulation and Block, Tu-Pos403	
	138.	Nattel, S. et al., "RSD1235: a novel antiarrhythmic agent with a unique electrophysiological profile that terminates AF in dogs" Antiarrhythmic Agents, pg 448	
	139.	Nishi, et al., (1985) "Studies on 2-Oxoquinoline Derivatives as Blood Platelet Aggregation Inhibitors. IV." Synthesis and Biological Activity of the Metabolites of 6-[4-(1-Cyclohexyl-1 H-5-tetrazolyl)butoxy]-2-oxo-1,2,3,4-tetrahydroquinoline (OPC-13013)", Chem. Pharm. Bull 33(3):1140-1147	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date October 28, 2004	
	140.	Nortran Arrhythmia Drug Demonstrates Oral Bioavailability. New Release Transmitted By CNN Newswire, June 21, 2001. 2 pages	
	141.	Orth, et al., (1978) "Cyclopentane-1-amines" Chemical Abstracts 89(15):555, abstract no. 129113f	
	142.	Orth, Peter et al., "The Novel AF Conversion Agent RSD1235 Preferentially Blocks a Late Component of the Human Heart (hH1) Na ⁺ Current Active During Repolarization" EP abstracts October 2003	
	143.	Plouvier, B., "Synthesis and Structure Activity Relationships of a Series of 2-Aminocyclohexyl ..as Potential Ischaemia Selective Ventricular Antiarrhythmics. BMPS 994	
	144.	Pugsley and Goldin (1999) "Molecular analysis of the Na ⁺ channel blocking actions of the novel class I antiarrhythmic" Br J Pharm, 127:9-18	
	145.	Pugsley, M.K. et al., "A Characterization of the Antiarrhythmic and Electrophysiological Properties of RSD992, A Novel Arylpiperazine Drug" (XIVth World Congress of Pharmacology: Meeting Abstract 22.8)	
	146.	Pugsley, M.K. et al., (1999) "Are the arrhythmias due to myocardial ischaemia and infarction dependent upon the sympathetic system?" Cardiol Res, 43:830-831	
	147.	Pugsley, M.K. et al., "Electropharmacology of two new class 1 agents" Heart and Stroke Annual	
	148.	Pugsley, M.K. et al., (1998) "Sodium Channel-Blocking Properties of Spiradoline, a K Receptor Agonist, are Responsible for Its Antiarrhythmic Action in the Rat" J Cardiovas Pharmacol, 32:863-974	
	149.	Ribeiro, W. et al., (2001) "Determination of RSD921 in human plasma by high-performance liquid chromatography-tandem mass spectrometry using tri-deuterated RSD921 as internal standard: application to a phase I clinical trial" J Mass Spectrom, 36:1133-1139	
	150.	Rich, T. C. et al. "Quinidine Block of the Human Cardiac hKv1.5 Channel in Inside-Out Patches" K Channels II: Regulation and Block, Tu-Pos404	
	151.	Roden, et al., (1996) "The Cardiac Ion Channels: Relevance to Management of	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date	October 28, 2004
		Arrhythmias", Annu. Rev. Med. 47:135-148	
	152.	Roy, D. et al., (2003) "RSD1235 Rapidly and Effectively Terminates Atrial Fibrillation" Eur Heart J.	
	153.	Rynbrandt, Ronald H, et al., (1971) "Cis-1-[2-(p-Anisidinomethyl)cyclohexyl]piperidine and Related Compounds Oral Hypoglycemic Agents" J Med Chem, 14(10): 985-987	
	154.	Sandro, L. et al., (1997) "Low pKa Predicts Antiarrhythmic Efficacy in a Series of Aminocyclohexyl Esters" J Mol Cell Cardiol.	
	155.	Sanguinetti, M. C. (1992) "Modulation of Potassium Channels by Antiarrhythmic and Antihypertensive Drugs" Hypertension 19(3):228-236	
	156.	Shiroshita-Takeshita A. et al. "Differential Efficacy of Drugs with Antioxidant Properties on Atrial Fibrillation Promotion by Atrial Tachycardia Remodeling in Dogs." Circulation 2003 in press, (accepted for presentation at AHA Scientific Sessions, November 8-12, 2003 Orlando, FL).	
	157.	Singh, (1998) "Antiarrhythmic Drugs: A Reorientation in Light of Recent Developments in the Control of Disorders of Rhythm", Am J Cardiol 81(6A):3D-13D	
	158.	Singh, (2003) "Atrial Fibrillation: Epidemiologic Considerations and Rationale for Conversion and Maintenance of Sinus Rhythm", J. Cardiovasc. Pharmacol. Ther. 8(Suppl 1):S13-S26	
	159.	Snyders, D. J. et al., (1993) "A Rapidly Activating and Slowly Inactivating Potassium Channel Cloned from Human Heart" J. Gen. Physiol. 101:513-542	
	160.	Snyders, D. J. et al., (1995) "Determinants of Antiarrhythmic Drug Action Electrostatic and Hydrophobic Components of Block of the Human Cardiac hKv1.5 Channel" Circ. Res. 77 (3):575-583	
	161.	Srilatha, B. et al., (1997) "Alterations in Rabbit Corpus Cavernosal Pharmacology By High Cholesterol Diet" Asia Par J Pharmacol, Abstract S15	
	162.	Steinbeck, G. (1992) "Proarrhythmische Wirkungen von Antiarrhythmika-theoretische und klinische Aspekte" Z Kardiol. 81: Suppl. 4, 139-143	
	163.	Tong, V. et al., (2001) "Determination of an aryether antiarrhythmic and its N-dealkyl metabolite in rat plasma and hepatic microsomal incubates using liquid	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date	October 28, 2004
		chromatography-tandem mass spectrometry" <i>J Chromatog B.</i> , 759:256-266	
	164.	Tong V. et al. (2001) "In vitro investigation of the hepatic extraction of RSD1070, a novel antiarrhythmic compound." <i>J Pharmacy & Pharmaceutical Sciences</i> , 4(1):15-23	
	165.	Valenzuela, C. et al. (1997) "Comparative effects of nonsedating histamine H ₁ receptor antagonists, ebastine and terfenadine, on human Kv1.5 channels" <i>Eur J Pharm</i> 326:257-263	
	166.	Valenzuela, C. et al., (1997) "Effects of Ropivacaine on a Potassium Channel (hKv1.5) Cloned from Human Ventricle" <i>Anesthesiology</i> 86:718-728	
	167.	Walker, J. A. (2002) "Antiarrhythmic Drug Development - Illusion and Disillusion" <i>Drug Develop Res</i> 55:1-2	
	168.	Walker, M. L. et al., (1996) "Determination of an arylacetamide antiarrhythmic in rat blood and tissues using reversed-phase high-performance liquid chromatography" <i>J Chromatog B.</i> , 675:257-263	
	169.	Walker, M.L. et al., (1996) "Increased Electrophysiological Activity in Raised K and low pH Improves Antiarrhythmic efficacy for a group of morpholinocyclohexyl Derivatives" <i>BPS Proceedings</i> 118P	
	170.	Walker, Michael J.A. and Guppy, Leon J. "Targeting Ischemic Ventricular Arrhythmias" <i>Cardiac Drug Development</i> , pp 175-201	
	171.	Wang, Z. et al., (1995) "Effects of Flecainide, Quinidine, and 4-Aminopyridine on Transient Outward and Ultrarapid Delayed Rectifier Currents in Human Atrial Myocytes ¹ " <i>J Pharm Exp ther.</i> , 272(1):184-196	
	172.	Wang, Z. et al., (1993) "Sustained Depolarization-Induced Outward Current in Human Atrial Myocytes" <i>Circ. Res.</i> 73:1061-1076	
	173.	Wat, J.Y.K. et al., "Effects of Arylbenzacetamides on Neuromuscular Preparation" <i>Proc West Pharmacol Soc</i> 19	
	174.	Wolf, et al. (1998) "Impact of Atrial Fibrillation on Mortality Stroke, and Medical Costs" <i>Arch Intern Med</i> 158: 229-234	
	175.	Wong, Judy et al., "Protein Binding Study of AA5, a New Antiarrhythmic Drug" Poster Conference August	
EXAMINER:		DATE CONSIDERED:	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			

Form PTO-1449		Docket Number 554792000401	Application Number 10/674,684
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant Allan I. Bain et al.	
(Use several sheets if necessary)		Filing Date September 29, 2003	Group Art Unit 1626
		Mailing Date October 28, 2004	
	176.	Wong, L. et al., "Capillary Electrophoresis Assay to Assess In Vitro Metabolic Stability of Novel Compounds in Human Liver Microsomes"	
	177.	Yeola, S. W. et al., (1996) "Molecular Analysis of a Binding Site for Quinidine in a Human Cardiac Delayed Rectifier K ⁺ Channel" Circ. Res. 78(6): 1105-1114	
	178.	Yong, et al., (1999) "RSD1000: A novel antiarrhythmic agent with increased potency under acidic and high-potassium conditions" J. Pharm. Exp. Ther. 289(1):236-244	
	179.	Yong, S.L. et al., (1996) "RSD1000: A Novel Antiarrhythmic Agent with an Improved Therapeutic Index" BPS Proceedings 119P	
	180.	Yong, S.L. et al., (1996) "SAR Evidence that Antiarrhythmic Activity is Unrelated to Opioid Kappa Agonist Activity" BPS Proceedings 117P	
	181.	Yong SL et al. (2000) "A Comparison of Four Chemically-Related K ⁺ Channel Blockers in Isolated Rat Ventricular Myocytes." Proceedings of the Western Pharmacology Society, vol. 43, p121 abstract	
	182.	Zhang, et al., (1997) "Inhibition of [³ H]-U69593 binding and the cardiac effects of U50, 488H by calcium channel blockers in the rat heart" Brit. J. Pharmacol. 120:827-832	
	183.	Zolotoy, Alexander B. et al., (2003) "Physicochemical Determinants for Drug Induced Blockade of HERG Potassium Channels: Effect of Charge and Charge Shielding" Curr Med Chem 1(3): 1-17	
EXAMINER:			
DATE CONSIDERED:			
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			